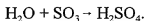
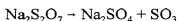
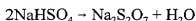
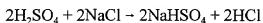


Claims

1. A continuous process for the production of hydrogen chloride whereby sulfuric acid and an alkali metal chloride in a molar ratio of approximately one to one are fed to a direct fired reaction chamber, products comprising hydrogen chloride and the corresponding alkali metal sulfate are withdrawn, and the hydrogen chloride is separated from combustion gases, said reaction chamber being one that provides for the counter flow of gaseous and solid streams within the reaction chamber, such that a chloride-free sulfate is obtained, wherein said process is characterized by the following chemical reactions:



2. The process of claim 1, wherein the alkali metal chloride is sodium chloride and the corresponding alkali metal sulfate is sodium sulfate.

3. The process of claim 1 wherein the alkali metal chloride is potassium chloride and the corresponding alkali metal sulfate is potassium sulfate.